MONTHLY WEATHER REVIEW,

AUGUST, 1874.

WAR DEPARTMENT,

Office of the Chief Signal Officen,

Telegrams and Reports for the Benefit of Commerce and Agriculture. INTRODUCTION.

In the preparation of this Review, besides the regular reports from the Signal Service Stations, U. S. Army, and the Canadian Stations, monthly meteorological registers, from many volunteer observers, and from Post Surgeons, forwarded by the Surgeon General, U. S. Army, and other data, have been examined. The accompanying charts illustrate, approximately, the courses of low barometers, the curves of mean atmospheric pressure and temperature, the prevailing direction of the wind and the distribution of rain.

The month has been characterized by an absence, comparatively, of destructive storms; by a deficiency of barometric pressure and continued high temperatures from southern Dakota to the Ohio valley and southward over the Gulf States; by extraordinary rain-falls over the southern New England coast and Long Island; by cooler weather than usual over the Atlantic States, Lake region and St. Lawrence valley; and by droughts in the Lower Lake region, Ohio valley, Gulf States and from Nebraska and Iowa southward, destroying crops in the two last sections.

BAROMETRIC PRESSURE.

Chart No. II shows the distribution of the pressure for the month, as represented by the curves in black. It is somewhat above the average over the Lake region. Over the remainder of the country it is below, especially from Kentucky and Tennessee to the Southwest and the Northwest. The latter is accounted for by the unusual number of low barometers which have moved down the Missouri valley, while others, traced over the Lake region, left slight depressions in those sections, which gradually disappeared, some of which have been traced. An examination of chart No. I will render this apparent.

Areus of low barometer accompanying chart No. I, shows that the paths of the centres of eleven have, approximately, been traced. Their centres have been located for each synchronous observation, (three times daily,) and these connected. In case of doubt as to their positions, they were united by broken lines. Such are observed during every month, as many pass to the north of the Lower Lake region and the St. Lawrence valley on their way eastward. Frequently they leave minor depressions within the limit of the stations. In detail they are as follows:

No. I properly belongs to July, having moved from Dakota eastward over the Upper Lake region to the St. Lawrence valley on the 29th, 30th and 31st ultimo. On the 1st